

REMARKS

Summary of Office Action

Claims 45-77 are pending in this application. Claims 45-53 and 58-62 have been withdrawn pursuant to a restriction requirement.

The Examiner rejected claims 54-57 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description.

The Examiner rejected claims 54-77 under 35 U.S.C. § 101 for failing to place the invention squarely within a statutory category.

Independent claim 54 and dependent claim 55 were rejected under 35 U.S.C. § 103(a) as being obvious from Huang et al. U.S. Patent No. 6,593,936 (hereinafter "Huang") in view of Montgomery et al. U.S. Patent No. 6,380,950 (hereinafter "Montgomery"), Kimoto U.S. Patent No. 6,792,577 (hereinafter "Kimoto"), and Madnick et al. U.S. Patent No. 6,282,537 (hereinafter "Madnick"). Dependent claims 56 and 57 were rejected under 35 U.S.C. § 103(a) as being obvious from Huang in view of Montgomery, Kimoto, and Madnick and further in view of Baru et al. U.S. Patent No. 7,028,252 (hereinafter "Baru").

Independent claim 63 and dependent claims 64 and 65 were rejected under 35 U.S.C. § 103(a) as being obvious from Sezan et al. U.S. Patent No. 6,236,395 (hereinafter "Sezan") in view of Madnick. Dependent claim 66 was rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Madnick and further in view of Foreman et al. U.S. Patent No. 6,628,303 (hereinafter "Foreman"). Dependent claim 67 was rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Madnick and further in view of Baru.

Independent claim 63 and dependent claim 64 were also rejected under 35 U.S.C. § 103(a) as being obvious from Sheth et al. U.S. Patent No. 6,311,194 (hereinafter "Sheth") in view of Madnick. Dependent claim 65 was also rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Madnick and further in view of Sezan. Dependent claim 66 was also rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Madnick and further in view of Foreman. And dependent claim 67 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Madnick and Baru.

Independent claim 68 and dependent claims 69-71 were rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru and Madnick.

Independent claim 72 and dependent claim 76 were rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Madnick, and Jacobs et al. U.S. Patent Application Publication No. 2004/0249708 (hereinafter "Jacobs"). Dependent claim 73 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Jacobs, and Madnick and further in view of Bowman-Amuah U.S. Patent Application Publication No. 2003/0058277 (hereinafter "Bowman"). Dependent claim 74 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Jacobs, and Madnick and further in view of Sezan. Dependent claim 75 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Jacobs, and Madnick and further in view of Foreman. And dependent claim 77 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Jacobs, and Madnick and further in view of Reimer et al. U.S. Patent No. 6,065,042 (hereinafter "Reimer").

Independent claim 72 and dependent claims 74 and 76 were also rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru, Madnick, and Jacobs. Dependent claim 73 was also rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru, Jacobs, and Madnick and further in view of Bowman. Dependent claim 75 was also rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru, Jacobs, and Madnick and further in view of Foreman. And dependent claim 77 was also rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru, Jacobs, and Madnick and further in view of Reimer.

Dependent claim 54 was objected to for a minor informality.

Summary of Applicants' Reply

Applicants have amended claims 54 and 63 to correct the minor informality regarding the claim phrase "the different types of digital assets."

Applicants have also amended claims 54-57 and 68 to change "computer readable medium" to "computer readable storage medium." Claim 54 was further amended to recite that only one DTD (document type definition) is stored on the computer readable storage medium.

No new matter has been added.

Reconsideration of this application in view of the amendments and following remarks is respectfully requested.

Rejections of Claims 54-57 Under 35 U.S.C. § 112

Claims 54-57 were rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement. In particular, the Examiner said that the

following phrase in claim 54 was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention:

“the computer processing system causes the parser to access the DTD, the query language utility to convert a demand containing user entered search parameters for information pertaining to the digital assets into a query to be transmitted to the database, and the style sheet processor to convert search results returned from the database into a style sheet for input to a client application.”

These rejections are respectfully traversed.

The cited claim phrase is fully supported in applicants' specification and drawings as demonstrated below:

“FIG. 4 shows an embodiment of an application interface configuration in accordance with the invention. In this configuration, a user provides search parameters 401 to client application 402, which is active on computer 301. Client application 402 converts search parameters 401 into a demand 304 for database information. ... [S]erver 201 processes demand 304 in a server application 404. Server application 404 preferably includes the following modules: an XML parser 414, an XSL processor 424, and an XML-SQL utility 434.” Applicants' specification, page 11, lines 15-26.

“By consulting the DTD for a document, a program called a parser (e.g., XML parser 414) can work with the markup codes that the document contains. DTD 700 ... defines the type of data to be stored for each digital asset.” Applicants' specification, page 13, lines 22-26.

“After converting demand 304 to SQL [structured query language] format (if necessary depending on the database), application 404 sends query 405 to database 305. Database 305 processes query 405 and returns search results 406 to application 404. Application 404 then processes results 406 to create one or more XML files. These XML files are sent by application 404 as data 407 to XSL style sheet 408. XSL style sheet 408 processes

data 407 and returns a response 307 Client application 402 then converts response 307 into a format that can be heard or viewed by the user.”

Applicants’ specification, page 11, line 34, to page 12, line 8.

FIG. 4 and the above passages from applicants’ specification fully support the cited claim phrase.

Accordingly, applicants respectfully request that the rejections of claims 54-57 under 35 U.S.C. §112, first paragraph, be withdrawn.

The Rejection of Claims 54-77 Under 35 U.S.C. § 101

Claims 54-77 were rejected under 35 U.S.C. § 101 because the Examiner said that “claims 54-77 fail to place the invention squarely within one statutory class of invention.” In particular, independent claim 54 recites “[a] computer readable medium” and independent claim 68 recites first and second computer readable mediums. The Examiner alleged that applicants have provided evidence in the specification on page 11, line 12, that the claim term “medium” is intended to include a network, and thus, according to the Examiner, the claims are “drawn to a form of energy,” which is not one of the four categories of statutory invention.¹

These rejections are respectfully traversed.

Applicants have amended independent claims 54 and 68 to recite computer readable storage mediums. A storage medium does not include a network, and thus the subject matter of these claims can in no way be construed as being directed to energy and should therefore now be statutory.

¹ Applicants assume the Examiner meant claims 54-57 and 68-71, and not claims 54-77, because (1) claims 58-62 were withdrawn from consideration and (2) claims 63-67 and 72-77 do not recite the phrase “computer readable medium.”

Accordingly, the subject matter of dependent claims 55-57 and 69-71, which depend from claims 54 and 68, respectively, should also now be statutory.

Applicants therefore respectfully request that the rejections of claims 54-57 and 68-71 under 35 U.S.C. § 101 be withdrawn.

The Rejections of Claims 54-57 Under 35 U.S.C. § 103(a)

Independent claim 54 and dependent claim 55 were rejected under 35 U.S.C. § 103(a) as being obvious from Huang in view of Montgomery, Kimoto, and Madnick. Dependent claims 56 and 57 were rejected under 35 U.S.C. § 103(a) as being obvious from Huang in view of Montgomery, Kimoto, and Madnick and further in view Baru.

These rejections are respectfully traversed.

Amended independent claim 54 is directed to a computer readable storage medium that has data stored thereon comprising a server application program and only one document type definition (DTD) for use in storing, retrieving, searching, or tracking at least three different types of digital assets stored in a single database. The at least three different types of digital assets include photographic, audio, promo, video, movie, and voiceover digital assets. The server application program comprises modules for a parser, a query language utility, and a style sheet processor. When the server application program is executed on a computer processing system, (1) the parser accesses the DTD, (2) the query language utility converts a dcmand containing user entered search parameters into a query to be transmitted to a database, and (3) the style sheet processor converts search results returned from the database into a style sheet for input to a client application.

Applicants' invention advantageously "allow[s] disparate types of digital assets ... to be easily and economically stored, retrieved, and tracked" (applicants' specification, page 1, lines 9-12; emphasis added). More particularly, "the invention advantageously permit[s] a single database to be used for storing, retrieving, and tracking different types of assets" (*id.* at page 5, lines 5-8; emphasis added). Users can "easily and economically replicate or transfer assets between repositories where the assets are located and destinations where the assets are currently needed. ... Thus, the costs associated with managing those assets are significantly reduced." (*id.* at lines 11-18; emphasis added).

The combination of Huang, Montgomery, Kimoto, and Madnick does not result in applicants' invention as defined in amended claim 54.

Huang is directed to a "method and system for description of synthetic audiovisual content" (abstract, lines 1-2; emphasis added). Huang describes "synthetic" audiovisual content as "graphics and animation" (column 2, line 58; emphasis added) and "sound generated via a model on a computer or computerized synthesizer" (*id.* at lines 63-65). Huang excludes video and audio recordings, which it considers "'natural' representations" (*id.* at line 57 and lines 60-61). See, also, Huang's appendix, column 15, line 4: "Natural Audio Visual Scene is outside of the scope of this invention" (emphasis added).

Huang is therefore limited to defining and searching for only "synthetic" audiovisual content – and not for defining and searching for, for example, photographic, audio, video, and movie digital assets as in applicants' invention.

Moreover, Huang's method and system are not directed to "storing, retrieving, searching, or tracking ... digital assets stored in a single database" (applicants' claim 54;

emphasis added): "Typically, a user, to search for a needed synthetic audiovisual content initiates a query that is passed on to a search engine that then retrieves the candidate content from one or more databases" (Huang Abstract; emphasis added).

The Examiner cited Montgomery because it purportedly teaches storing photographs, audio, and voiceovers on a disk.

The Examiner cited Kimoto because it purportedly teaches converting a document object with a conversion program called an "XSL processor."

The Examiner cited Madnick because it purportedly teaches converting a user's query into sub-queries.

The Examiner then concluded that it would have been obvious to apply Montgomery's teaching, Kimoto's teaching, and Madnick's teaching to Huang's system.

None of the cited references discloses or suggests the use of a single DTD to define the metadata structure of different types of digital assets stored in a single database. The single DTD advantageously facilitates the search and retrieval of different types digital assets from a single database.

A significant disadvantage of having, for example, multiple DTD's each representing a different type of digital asset stored in a different database is the additional processing time required by search and retrieval software to access each of the different DTD's, convert a user's search parameters into possibly multiple demands to be transmitted to multiple databases, and to possibly convert multiple search results returned from multiple databases into multiple style sheets for input to a client application, which may then have to combine the multiple sheets into a form that can be presented to the user.

Such a system, as would result from the combination of Huang, Montgomery, Kimoto, and Madnick, is plainly "impractical for storing a large variety of different types of digital assets" (applicants' specification, page 2, lines 35-36).

The combination of Huang, Montgomery, Kimoto, and Madnick plainly does not result in applicants' invention as defined in amended claim 54.

Independent claim 54 is therefore not obvious from that combination.

For at least the reasons discussed above, dependent claims 55-57, which depend directly or indirectly from independent claim 54, are also not obvious from the cited combinations of references (i.e., dependent claims are patentable if their independent claim is patentable).

Accordingly, applicants respectfully request that the rejections of claims 54-57 under 35 U.S.C. § 103(a) be withdrawn.

The Rejections of Claims 63-67 Under 35 U.S.C. § 103(a)

Independent claim 63 and dependent claims 64 and 65 were rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Madnick. Dependent claim 66 was rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Madnick and further in view of Foreman. And dependent claim 67 was rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Madnick and further in view of Baru.

Independent claim 63 and dependent claim 64 were also rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Madnick. Dependent claim 65 was also rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Madnick and further in view of Sezan. Dependent claim 66 was also rejected under 35 U.S.C. § 103(a) as being obvious

from Sheth in view of Madnick and further in view of Foreman. And dependent claim 67 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Madnick and Baru.

These rejections are respectfully traversed.

Independent claim 63 is directed to a computer system for storing, searching, retrieving, and tracking different types of digital assets. The computer system includes a server and a processor coupled to the server. The server comprises application software and a database. The database stores a plurality of at least three different types of digital assets. The computer system also includes (1) search and retrieval software operative to execute on the processor and to request a user to enter one or more digital asset types as search criteria, and (2) a document type definition (DTD) accessible by the server application software. The DTD defines the data structure of each different type of digital asset stored in the database (*see, e.g.*, applicants' specification, Example 1, on pages 16-24).

Sezan Reference

Sezan purportedly discloses various description schemes for managing audiovisual information. Although Sezan mentions meta information for a video or audio program, it does so in the context of a single video or audio program, not a collection of digital asset types: "Referring to FIG. 15, the meta information description scheme 408 generally includes various descriptors which carry general information about a [i.e., one] video (or audio) program" (Sezan, column 27, lines 7-9; emphasis added).

Sezan does not teach or suggest a DTD that defines metadata for at least three types of digital assets. The only disclosure of a DTD in Sezan is in an XML example of its

description schemes, beginning in column 14, line 53. The reference is to an external DTD file entitled "mpeg-7.dtd" (*see, e.g., id.* at line 54) -- the content of which is not disclosed.

Sezan also does not teach or suggest a database storing at least three different types of digital assets.

Sezan further does not teach or suggest a user entering one or more types of digital assets as search criteria for a database search.

As mentioned above, Madnick was cited because it purportedly teaches converting a user's query into sub-queries. Madnick therefore does not make up for the deficiencies of Sezan.

Sheth Reference

Sheth purportedly discloses a system and method "for creating a database of metadata" (Sheth column 4, lines 54-55, and abstract, line 1).

Sheth's FIGS. 1 and 2, cited by the Examiner, show asset domains and subdomains of a model and a table of base attributes, respectively. These FIGS. do not show or indicate anything about different types of digital assets being stored in a same database or a DTD defining metadata for different types of digital assets.

Sheth's FIG. 6, also cited by the Examiner, shows an XML-based definition for a movie (*see* "<category>Movie</category>") -- thus, FIG. 6 shows an XML-based definition for only one type of digital asset. That is, Sheth's FIG. 6 shows "a sample of a [sic] XML-based definition of an asset" (column 6, lines 8-9; emphasis added). This XML document for a single type of media is created by an "extractor" (*see* column 11, lines 11-56). An extractor uses extraction rules (*id.* at line 42) that "list the metadata attributes for the type [i.e., one type] of

media that [a Web] site contains” (*id.* at lines 43-45; emphasis added). Thus, Sheth’s FIG. 6 contains data values encoded in XML about a movie, and not a DTD encoded in XML containing definitions of data elements pertaining to different types of digital assets (as required by applicants’ claim 63). Accordingly, Sheth’s FIG. 6 does not show an important feature of applicants’ invention.

Sheth’s FIGS. 9 and 10, cited by the Examiner, show components of an extraction rule and a graphical depiction of a process for enhancing an asset (i.e., one asset – a baseball asset), respectively. Again, these FIGS. do not show or indicate anything about different types of digital assets being stored in a same database or a DTD defining metadata for different types of digital assets.

In sum, Sheth consistently refers to the content of the XML document as being of a single type: “the type of media” and “the asset type.” Sheth explains that its extractors scan for (and thus create XML documents of) only one type of media because “[t]he set of attributes associated with, for example, a news video (reporter, location, event date, etc.) is different from the set of attributes associated with a sports highlight (teams, players, score etc)” (column 11, lines 46-50; emphasis added).

Thus, Sheth teaches away from creating a single XML document that contains definitions of more than one type of digital asset.

Therefore, although Sheth discusses metadata for digital assets, Sheth does not teach or suggest a DTD that includes metadata for at least three types of digital assets.

Sheth further does not teach or suggest a database storing at least three different types of digital assets.

As mentioned above, Madnick was cited because it purportedly teaches converting a user's query into sub-queries. Madnick therefore does not make up for the deficiencies of Sheth.

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In sum, the combinations of "Sezan and Madnick" and "Sheth and Madnick" do not result in applicants' invention as defined in independent claim 63.

Independent claim 63 is therefore not obvious from those combinations.

For at least the reasons discussed above, dependent claims 64-67, which depend from independent claim 63, are also not obvious from the cited combinations of references (i.e., dependent claims are patentable if their independent claim is patentable).

Accordingly, applicants respectfully request that the rejection of claims 63-67 under 35 U.S.C. § 103(a) be withdrawn.

The Rejections of Claims 68-71 Under 35 U.S.C. § 103(a)

Independent claim 68 and dependent claims 69-71 were rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru and Madnick.

These rejections are respectfully traversed.

Independent claim 68 is directed to a computer system for storing, searching, retrieving, and tracking different types of digital assets. The computer system includes a server and a processor coupled to the server. The server comprises application software and a database. The database stores a plurality of different types of digital assets. The computer system also includes (1) search and retrieval software operative to execute on the processor and to request a user to enter one or more digital asset types as search criteria, and (2) a single data definitions

file accessible by the server application software. The data definitions file defines the data structure of each different type of digital asset stored in the database.

As discussed above Sezan mentions meta information for a video or audio program in the context of a single video or audio program, not a collection of digital asset types.

Sezan does not teach or suggest a DTD that includes metadata for two or more types of digital assets.

Sezan also does not teach or suggest a database storing a plurality of different types of digital assets.

Sezan further does not teach or suggest a user entering one or more types of digital assets as search criteria for a database search.

The Examiner cited Baru because it purportedly teaches a DTD that defines metadata attributes for rights management of video recordings and graphics. Thus, Baru does not make up for the deficiencies of Sezan.

As mentioned above, Madnick was cited because it purportedly teaches converting a user's query into sub-queries. Thus, Madnick does not make up for the deficiencies of Sezan or Baru.

Plainly, the combination of Sezan, Baru and Madnick does not result in applicants' invention as defined in claim 68.

Independent claim 68 is therefore not obvious from that combination.

For at least the reasons discussed above, dependent claims 69-71, which depend from independent claim 68, are also not obvious from the cited combinations of references (i.e., dependent claims are patentable if their independent claim is patentable).

Accordingly, applicants respectfully request that the rejections of claims 68-71 under 35 U.S.C. § 103(a) be withdrawn.

The Rejections of Independent Claims 72-77 Under 35 U.S.C. § 103(a)

Independent claim 72 and dependent claim 76 were rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Madnick, and Jacobs. Dependent claim 73 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Jacobs, and Madnick and further in view of Bowman. Dependent claim 74 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Jacobs, and Madnick and further in view of Sezan. Dependent claim 75 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Jacobs, and Madnick and further in view of Foreman. And dependent claim 77 was rejected under 35 U.S.C. § 103(a) as being obvious from Sheth in view of Baru, Jacobs, and Madnick and further in view of Reimer.

Independent claim 72 and dependent claims 74 and 76 were also rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru, Madnick, and Jacobs. Dependent claim 73 was also rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru, Jacobs, and Madnick and further in view of Bowman. Dependent claim 75 was also rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru, Jacobs, and Madnick and further in view of Foreman. And dependent claim 77 was also rejected under 35 U.S.C. § 103(a) as being obvious from Sezan in view of Baru, Jacobs, and Madnick and further in view of Reimer.

These rejections are respectfully traversed.

Independent claim 72 is directed to a computer system for storing, searching, retrieving, and tracking different types of digital assets. The computer system includes a server and a processor coupled to the server. The server comprises application software and a database. The database stores four types of digital assets. The computer system also includes (1) search and retrieval software operative to execute on the processor and to request a user to enter one or more digital asset types as search criteria, and (2) a document type definition (DTD) accessible by the server application software. The DTD defines the data structure of the four types of digital assets stored in the database.

As discussed above, Sheth teaches away from creating a single XML document that contains definitions of more than one type of digital asset. Accordingly, Sheth does not teach or suggest a DTD that includes metadata for more than one type of digital asset.

As also discussed above, Sezan does not teach or suggest (1) a DTD that includes metadata for two or more types of digital assets, (2) a database storing a plurality of different types of digital assets, and (3) a user entering one or more types of digital assets as search criteria for a database search.

Baru was cited because it purportedly teaches a DTD that defines metadata attributes for rights management of video recordings and graphics. Thus, Baru does not make up for the deficiencies of Sheth or Sezan.

Madnick was cited because it purportedly teaches converting a user's query into sub-queries. Thus, Madnick does not make up for the deficiencies of Sheth or Sezan.

The Examiner cited Jacobs because it purportedly teaches storing advertisements on a storage medium. Jacobs is directed to "e-mail software which incorporates an automatic

advertisement download function for automatically downloading advertisements to be displayed when the e-mail software is activated" (Jacobs, page 3, paragraph 21). Jacobs is also directed to software for use on a client device that instantiates an advertisement download function" (*id.* paragraph 26; cited by the Examiner). Jacobs therefore in no way makes up for the deficiencies of Sheth or Sezan.

In sum, the combinations of "Sheth, Baru, Madnick, and Jacobs" and "Sezan, Baru, Madnick, and Jacobs" do not result in applicants' invention as defined in independent claim 72.

Independent claim 72 is therefore not obvious from those combinations.

For at least the reasons discussed above, dependent claims 73-77, which depend from independent claim 72, are also not obvious from the cited combinations of references (i.e., dependent claims are patentable if their independent claim is patentable).

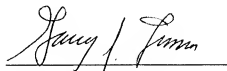
Accordingly, applicants respectfully request that the rejections of claims 72-77 under 35 U.S.C. § 103(a) be withdrawn.

Conclusion

The foregoing demonstrates that claims 54-57 and 63-77 are allowable.

Therefore, subject to the disposition of withdrawn claims 45-53 and 58-62, this application is in condition for allowance. Reconsideration and allowance are accordingly respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, reading "Garry J. Tuma", is written over a horizontal line.

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